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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,458	02/25/2002	Daniel Kopf	111363	6448

7590 05/21/2004  
Oliff & Berridge  
PO Box 19928  
Alexandria, VA 22320

EXAMINER	
MENEFE, JAMES A	
ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

09/980,458

Applicant(s)

KOPF, DANIEL

Examin r

James A. Menefee

Art Unit

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-- The MAILING DATE of this c mmunication appears n the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

In response to the preliminary amendment, claims 3, 5, 6, 9, 10, 12, and 13 are amended to remove multiple dependencies. Claims 1-13 are pending.

### ***Information Disclosure Statement***

Note that there is no information disclosure statement in the file, but numerous references were submitted along with the international application. If Applicants wish these references to be made of record in the file, an information disclosure statement must be filed.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 6, 9, and 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases "such as" or "preferably" or "for instance" render the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). "Such as" is located in claim 1 lines 1 and 4-5, claim 6 line 4, claim 9 line 4, and claim 10 line 3; "preferably" is located in claim 10 line 5; "for instance" is located at claim 10 line 10. Claims 11-13 are rejected as depending on the rejected base claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weingarten et al. (US 6,393,035).

Regarding claims 1 and 7, Weingarten discloses a laser system comprising a laser setup 2 for generating a laser beam, a nonlinear optical material 4, an optical system with imaging means for imaging said laser beam onto said nonlinear material 4, the imaging means comprising an optical imaging system 32 for focusing the laser beam onto the material 4, and an optical means 31 for changing the angle of propagation of said laser beam, whereby the optical imaging system 32 is disposed between the means 31 and the material 4. The system is described as being designed via the well known ABCD matrix method. It is not disclosed that in the matrix D is substantially 0. However, in designing a matrix, one skilled in the art could, without undue experimentation, easily change the values of the matrix to 0, and doing so would require only obvious engineering design consideration.

Regarding claim 2, the means 31 is a part of the resonator if the setup.

Regarding claims 3-4, the beam is reflected back upon itself after passing the material 4 by a reflective surface on the back of the material.

Regarding claim 5, the system may further comprise a dichroic beam splitter 53.

Regarding claims 6 and 9, the material 4 is a semiconductor saturable absorber.

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Regarding claim 8, there is not disclosed a second imaging system in addition to the first imaging system. However, to duplicate parts for multiplied effect is evidence of obviousness. *See St. Regis Paper Co., v. Bemis Co.*, 549 F.2d 833, 193 USPQ 8, 11 (7th Cir. 1977).

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weingarten as applied to the claims above, and further in view of Do et al. (US 5,936,785). Weingarten teaches the limitations of the claims above, but fails to disclose the optical component and holder as claimed. Do teaches the use of such an optical component and holder. Since Weingarten does not disclose the use of any holder, one skilled in the art would recognize that there must be some sort of means for holding the system. It would have been obvious to one skilled in the art to use Do's holder, because it provides precise and repeatable positioning of the optical elements, as taught by Do.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of these references discloses optical systems formed or described by an ABCD matrix.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Menefee whose telephone number is (571) 272-1944.

The examiner can normally be reached on M-F 8:30-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JM

May 5, 2004



**Don Wong**  
**Supervisory Patent Examiner**  
**Technology Center 2800**